Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

- 1-46 (Cancelled).
- 47. (Currently amended) Process for the production of a multi-layer electrode or electrode assembly, wherein:
 - a first layer is rolled onto a carrier;
- at least one additional layer is produced by spraying on a powder in a dry manner after said first layer is rolled onto the carrier; and

said at least one additional layer is a function layer;

wherein:

the first layer is a rolled-on reaction layer;

said carrier is an electrically non-conductive carrier; and

a contact layer is sprayed onto said electrically non-conductive carrier on a side of the carrier opposite that of the rolled-on reaction layer.

- 48. (Cancelled).
- 49. (Previously presented) Process as defined in claim 47, wherein the first layer is rolled onto the carrier by means of one or more heated rollers.
- 50. (Previously presented) Process as defined in claim 47, wherein the carrier is designed as a carrier mesh.

- 51-55. (Cancelled).
- 56. (Previously presented) Process as defined in claim 47, wherein the sprayed-on function layer is a reaction layer.
- 57. (Previously presented) Process as defined in claim 56, wherein the reaction layer is produced by spraying on a catalyst carrier material on a carbon basis.
- 58. (Previously presented) Process as defined in claim 57, wherein platinum is used as the catalyst carrier material.
- 59. (Withdrawn) Process as defined in claim 47, wherein a sprayed-on function layer is a barrier layer.
- 60. (Withdrawn) Process as defined in claim 59, wherein a mixture of carbon and a hydrophobing material is used for forming a barrier layer.
- 61. (Withdrawn) Process as defined in claim 60, wherein PTFE is used as hydrophobing material.
- 62. (Withdrawn) Process as defined in claim 59, wherein the barrier layer has a surface density in the range of between 0.3 mg/cm² and 1 mg/cm².
- 63. (Withdrawn) Process as defined in claim 47, wherein a carrier structure is produced by rolling carbon powder onto a carrier.
- 64. (Withdrawn) Process as defined in claim 63, wherein the carbon powder is rolled on mixed with a binding agent.

- 65. (Withdrawn) Process as defined in claim 64, wherein a hydrophobing material is used as binding agent.
- 66. (Withdrawn) Process as defined in claim 64, wherein PTFE is used as binding agent.
- 67. (Withdrawn) Process as defined in claim 63, wherein a pore-forming agent is added to the material to be rolled on.
- 68. (Withdrawn) Process as defined in claim 63, wherein the composition of the material to be rolled on and/or the particle size therein and/or a contact pressure during the roller application is adjusted.
- 69. (Withdrawn) Process as defined in claim 63, wherein the carrier structure is connected to a membrane.
- 70. (Withdrawn) Process as defined in claim 69, wherein a function layer is sprayed onto the carrier structure and/or onto the membrane prior to their connection.
- 71. (Withdrawn) Process as defined in claim 70, wherein prior to the connection between carrier structure and membrane a function layer is sprayed onto a connecting side of the membrane and an oppositely located side.
- 72. (Withdrawn) Process as defined in claim 71, wherein the respective spraying on is carried out simultaneously.
- 73. (Withdrawn) Process as defined in claim 70, wherein the function layer is a reaction layer.
- 74. (Withdrawn) Process as defined in claim 70, wherein the connection between carrier structure and membrane is brought about by roller application.

- 75. (Withdrawn) Process as defined in claim 69, wherein an additional carrier structure is connected to the carrier structure-membrane connection.
- 76. (Withdrawn) Process as defined in claim 75, wherein the additional carrier structure is rolled on.
- 77. (Withdrawn) Process as defined in claim 75, wherein the additional carrier structure is built up essentially in the same way as the carrier structure first connected to the membrane.
- 78. (Withdrawn) Process as defined in claim 75, wherein the additional carrier structure is produced essentially in the same way as the carrier structure first connected to the membrane.
- 79. (Withdrawn) Process as defined in claim 69, wherein an electrode-membrane unit for a fuel cell is formed.
- 80. (Cancelled).
- 81. (Currently amended) Process as defined in claim 80 47, wherein a barrier layer is sprayed onto the rolled-on reaction layer.
- 82. (Cancelled).
- 83. (Currently amended) Process as defined in claim 82 47, wherein: the contact layer comprises a barrier layer.
- 84. (Currently amended) Process as defined in claim 82 47, wherein: the function layer comprises a barrier layer; and

the barrier layer and the contact layer are sprayed onto opposite sides of the carrier at the same time.

- 85. (Currently amended) Process as defined in claim 80 <u>47</u>, wherein a membrane is arranged on an outer function layer.
- 86. (Withdrawn) Fuel cell electrode assembly produced according to the process of claim 47 wherein:

a carrier structure is produced during the rolling step by rolling carbon powder onto a carrier, said carrier being connected to a membrane.

- 87. (Withdrawn) A gaseous diffusion electrode produced according to the process of claim 47.
- 88. (Withdrawn) An oxygen-consuming electrode produced according to the process of claim 47.
- 89. (Withdrawn) An electrode produced by the process of claim 47 having a catalytically active reaction layer, wherein a barrier layer produced by means of a sprayed on powder is arranged on the reaction layer.
- 90. (Withdrawn) Electrode as defined in claim 89, wherein the barrier layer is formed by a mixture of carbon and a hydrophobing material.
- 91. (Withdrawn) Electrode as defined in claim 90, wherein the hydrophobing material is PTFE.
- 92. (Withdrawn) Electrode as defined in claim 89, wherein the barrier layer has a surface density in the range of between 0.4 mg/cm² and 0.8 mg/cm².